TABLE 15. (Continued)

	Army Program AFQT I-IIIA		Hold-the-Line Program	One-Year Cut in Resources	Three-Year Cut in Resources
	69 Percent	65 Percent			
Percent AFQT I-IIIA	66.6	63.2	61.7	62.1	61.0
Long-Run NPS Accessions c/					
Number (in thousands)	131.9	131.5	135.9	137.7	140.0
Percent male HSDG d/	88.5	88.5	79.0	75.0	69.5
Percent AFQT I-IIIA	69.0	65.0	65.0	65.7	62.9

SOURCE: Congressional Budget Office.

a. All programs assume that the proportion of AFQT IV recruits (all of whom are high school graduates) is held at 10 percent.

b. In millions of current dollars (adjusted for inflation).

c. Signifies recruits who are non-prior-service--without previous military experience. A detailed distribution of accessions appears in Appendix C.

d. High school diploma graduates.

e. In millions of 1987 dollars.

strong cohort effect on youths' civilian wages), history warns that the number of high-quality recruits could turn down very fast.

Alternative II: One-Year Reduction In Resources

A substantial, one-time cut in the Army's resources for recruiting could be made by suspending the enlistment bonus program in 1987. High-quality recruits who would otherwise qualify for bonuses could still receive supplemental education benefits, thus preserving some inducement for them to enlist. In addition, junior soldiers--those in the first two pay grades E-1 and E-2--would not receive the 4 percent October 1986 military pay raise contained in the President's budget. Such an action has precedent, in that enlisted personnel with less than four months' service did not receive a pay raise in 1984.

Effects on the Force. CBO projects that a one-time cut in bonuses and pay (if not restored in later years) would lessen the next five years' supply of high-quality recruits by about 23 percent. The proportion of male high school graduates would gradually decline from 88 percent in 1987 to about 74 percent by 1991. The proportion of AFQT I-IIIA recruits would stay high, at around 66 percent, but many would be nongraduates.

In five years' time, the career force would look substantially the same as under the first alternative--but five-year costs would be $425 million less, for a total of $96.2 billion. In the longer run, the lower proportion of high school graduates would mean higher attrition, and hence a slightly smaller career force of 280,000 soldiers.

Pros and Cons. Compared with the Army's program, a one-time cut in pay and bonuses would reduce the five-year costs of manning the Army by $835 million to $1.2 billion. 7/ Quality would also be lower than under the Army's program, though it would stay comparatively high in the near term. The proportion of high school graduates would stay above 80 percent through 1989, only then dropping into the seventies--decent by historical standards, but somewhat lower than the proportion in the male youth population. Recruits would, though, still have generally high AFQT scores. Almost two-thirds would score above the 50th percentile on the AFQT; and only 10 percent would be in category IV (versus 25 percent for the eligible population).

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7. These figures include only the Army's budget. Freezing the pay of junior personnel would affect the other military services as well, thus yielding actual savings in excess of those shown here.

This alternative would probably lessen the Army's overall capability more than Alternative I, though still not dramatically. CBO's productivity index suggests a long-run decrease (relative to the Army's 65 percent program) of about 1.1 percent. This compares with a projected decrease of about 2.2 percent in the long-run cost of manning the Army.

A one-year cut in resources would further erode the Army's safety margin. The risks attached to unexpected economic trends would thus be much higher. Moreover, any projection of the effects of cuts in pay or bonuses on the willingness of youths to enlist must be in some degree uncertain. Any proposal to cut military pay carries with it some risk of doing more damage than is anticipated here.

Alternative III: Three-Year Reduction in Resources

Building on the previous alternative, Alternative III would further reduce recruits' pay and benefits. In addition to suspending enlistment bonuses and freezing the pay of junior personnel in 1987, it would limit their pay raises in 1988 and 1989 to 3 percent; raises of roughly 6 percent a year would be required to keep pace with civilian wage increases. Comparable pay raises for junior personnel--without "catch-ups"--would resume in 1990.

Effects on the Force. Several years of reductions would increasingly erode the willingness of high-quality youths to enlist. CBO projects that between 1985 and 1991 the supply of high-quality recruits would decline by roughly 28 percent, or 10 percentage points more than under the first alternative. Such erosion would bring the Army near the statutory minimum for quality, with only 68 percent of male recruits holding high school diplomas by 1991. The Army might find it necessary to recruit male nongraduates who score below average in AFQT category IIIB.

Like the other alternatives, this one would have little effect on the career force in the near term. But in the longer run it might give the Army only 278,000 career personnel--2,000 fewer than under the previous alternative, and up to 6,600 fewer than under the Army's program.

Pros and Cons. Relative to the Army's program, cutting back resources for three years would save a total of $1.2 billion or $1.6 billion over the next five years. Though quality would decline, Alternative III would still leave the Army better off than it was in 1979 or 1980. Moreover, the Army could partially counter the effects of cutting pay and bonuses through other changes in policy--for instance, by lifting the 10 percent restriction on

recruits in AFQT category IV, or by recruiting more men and women who have prior military service.

Nevertheless, several years' reductions in recruit pay would go far to negate the Army's recent gains in capability. In the near term, the substantial drop in recruit quality would leave the Army little cushion against unexpected adverse trends in recruiting. In the longer term, the enlisted force's capability would lessen significantly. Compared with the Army's program (65 percent AFQT I-IIIA), Alternative III would result in a decrease in overall productivity of about 1.7 percent. Long-run costs would fall by about 3 percent.

APPENDIX A

CALCULATING PRODUCTIVITY AND COST

This appendix describes how CBO calculated the productivities and costs of alternative recruiting policies. The central element is an index of military productivity. Since not all soldiers contribute equally to the Army's capability, the productivity index converts a projected distribution of enlisted personnel to a rough measure of overall military effectiveness.

PROJECTING ENLISTED PERSONNEL

The index of productivity works from a long-run projection of the Army's enlisted force (roughly 30 years hence). To get there, CBO first classified the present inventory of enlisted personnel by education (high school graduate or dropout), by test-score category on the Armed Forces Qualification Test (categories I-IIIA, category IIIB, or category IV), and by years of military service (1 through 30); the resulting distribution appears in Table A-1. CBO's enlisted transition model--a basic Markov-chain model--uses matrices of "transition probabilities" to simulate the retention or separation decisions of enlisted personnel in each class.

A transition probability is the likelihood that a particular service member, in year of service (YOS) i at the start of a fiscal year, with j months until expiration of term of service (ETS), will be in YOS i+1 at the end. The transition probability for someone making a reenlistment decision during the projection period (less than 13 months to ETS) represents the reenlistment rate. The model extrapolates transition probabilities from historical rates provided by the Defense Manpower Data Center.

Of all the transition probabilities, only reenlistment rates are assumed to depend on future changes in civilian unemployment and relative military pay. Elasticities are used to express the percentage changes in reenlistment rates that may be expected from a 1 percent change in either of those two variables. They decline (become more inelastic) as years of service increase. With respect to changes in unemployment, CBO uses elasticities that range from 0.50 at the first reenlistment point to less than 0.10 after YOS 11. For changes in relative pay, the elasticities range from 2.5 in early

TABLE A-1. DISTRIBUTION OF ARMY ENLISTED PERSONNEL AT THE END OF FISCAL YEAR 1985 BY EDUCATION, AFQT CATEGORY, AND YEARS OF MILITARY SERVICE a/

Years of Service	AFQT Category I-IIIA	IIIB	IV	Unknown
		High School Graduates		
1	56,350	31,929	10,162	4
2 to 4	124,429	64,610	30,781	12
5 to 8	26,467	17,110	35,058	176
9 to 12	19,903	11,451	10,961	322
13 to 16	9,894	4,779	3,867	70
17 or more	119	42	36	5
Total	237,162	129,921	90,865	589
		Nongraduates		
1	8,481	612	10	4
2 to 4	16,956	2,812	90	1
5 to 8	5,674	6,371	8,701	37
9 to 12	5,499	5,817	3,986	76
13 to 16	3,171	2,643	1,807	29
17 or more	49	18	33	9
Total	39,830	18,273	14,627	156

(Continued)

a AFQT categories are expressed under the Defense Department's old population reference for all except the first year of service.

TABLE A-1. (Continued)

Years of Service	AFQT Category I-IIIA	IIIB	IV	Unknown
		Education Unknown b/		
1	851	339	46	159
2 to 4	8,589	5,484	177	378
5 to 8	14,112	7,370	3,446	1,954
9 to 12	10,765	5,226	3,049	2,251
13 to 16	12,974	4,806	2,101	2,814
17 or more	20,811	9,998	9,577	7,337
Total	68,102	33,223	18,396	14,893
		All		
1	65,682	32,880	10,218	167
2 to 4	149,974	72,906	31,048	391
5 to 8	46,253	30,851	47,205	2,167
9 to 12	36,167	22,494	17,996	2,649
13 to 16	26,039	12,228	7,775	2,913
17 or more	20,979	10,058	9,646	7,351
Total	345,094	181,417	123,888	15,638

SOURCE: Unofficial tabulations provided by the Defense Manpower Data Center.

b. Data on soldiers' education go only as far back as 1970, hence the large number of soldiers with more than 15 years' service whose educational background is unknown. Of those educational unknowns with fewer than 15 years' service, the majority probably enlisted as prior-service recruits.

TABLE A-2. ESTIMATED RETENTION ELASTICITIES FOR CHANGES IN RELATIVE MILITARY PAY AND CIVILIAN UNEMPLOYMENT, BY YEARS OF SERVICE

Years of Service a/	Retention Elasticities for Changes In: Pay	Unemployment
2	2.8	0.60
3	2.4	0.50
4	2.2	0.45
5	1.8	0.35
6	1.7	0.30
7	1.6	0.30
8	1.3	0.20
9	1.1	0.20
10	1.0	0.15
11	0.9	0.15
12	0.8	0.10
13	0.7	0.10
14	0.5	0.05
15	0.5	0.05
20	2.5	0.35
21	2.4	0.30

a. Retention in years of service 16-19 and 22-30 is assumed not to change with respect to modest year-to-year changes in economic variables.

years of service to less than 1.0 after YOS 11. (See Table A-2.) CBO estimated these elasticities from logistic regression equations that relate past changes in unemployment and pay to the Army's historical reenlistment rates.

The effects of changes in pay are expressed through the Annualized Cost of Leaving model (ACOL). This model links the reenlistment decision to a comparison between the cost of leaving service now and the cost of leaving at some later date. Real increases in military pay boost the cost of leaving now, thus raising reenlistment rates. 1/

1. For a brief overview of the ACOL model, see Congressional Budget Office, *Elimination of Double Tax Benefits for Military Homeowners* (March 1986), Appendix C.

CALCULATING THE INDEX

CBO simplified the long-run projection by collapsing the force into 18 groups based on aptitude, education, and experience (as shown in Table 12). The index is based on each group's "productivity equivalence": the total number of soldiers belonging to that group multiplied by the relative productivity of the typical soldier in that group. The sum of these figures provides a rough measure of the Army's overall capability under different recruiting policies.

The index is meant to be suggestive rather than predictive. By adding group productivities together, it oversimplifies the relationships between quality and performance (as discussed in greater detail below). Moreover, the index involves the stringent assumption that nonlabor inputs (new weapons, capital intensity, technical progress) will be constant, or else will have no influence on the relative productivities of different classes of soldiers. 2/ The Army's analysis of tank crews, for one, calls this assumption into question insofar as a new nonlabor input (the M-1 tank) has improved the relative productivity of AFQT category IV crewmen.

The Additivity Assumption

The additivity assumption deserves emphasis, because it makes different types of personnel perfect substitutes for one another. 3/ To illustrate, consider a hypothetical case in which one sergeant is deemed to be worth three newly trained recruits. No matter how many sergeants the Army has, the additivity assumption lets three recruits substitute for one sergeant without sacrificing productivity. 4/ Even if the Army lost 90 percent of its sergeants, three newly-trained recruits would still make up for the supervision and guidance lost with each departing sergeant. Clearly, this extreme case strains the additivity assumption. But since CBO foresaw no such dramatic shift in the enlisted personnel force, assuming a more sophisticated relationship than additivity would probably make minor difference. 5/

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2. Mark Albrecht, *Labor Substitution in the Military Environment: Implications for Enlisted Force Management* (Santa Monica: The Rand Corporation, November 1979), p. 9.

3. That is, the elasticity of substitution between any two groups is assumed to be infinite.

4. See Center for Naval Analyses, Institute of Naval Studies, *Navy Manpower Considerations 1970-1980* (February 1966), Appendixes to Annex G.

5. Moreover, some empirical research suggests that elasticities of substitution between different classes of labor can be as high as 10.

Assumptions about Relative Productivity

Choosing relative productivities to use in the index involves educated guesswork, because the empirical evidence is not definitive. Soldiers in AFQT categories I-IIIA seem to perform 10 percent to 20 percent better during the first term of service, and productivity probably rises with seniority. But no one knows for certain the connection between high school graduation and performance in the first-term force, nor the connection between ability and experience in the career force.

Because of this uncertainty, CBO calculated the index of productivity under 18 alternative sets of assumptions. All combine differing judgments about the effects on performance of high school graduation and experience, and express the productivity of the average member for a particular class of personnel, relative to the productivity of a fully-trained AFQT I-IIIA soldier who has five to eight years of military service.

The calculations all share two elements. First, the average first-term soldier is assumed to be only about three-quarters as productive as a fully-trained soldier with five to eight years of military service. CBO based this on findings from the Rand Corporation's Enlisted Utilization Survey (EUS). Second, CBO assumed that the effects of high school graduation on soldiers' individual productivity, if any, do not persist past the first term.

On the effects of AFQT, CBO tested three alternative assumptions. The first corresponds to the position of the Office of the Assistant Secretary of Defense (for Force Manpower and Personnel) that AFQT is not a meaningful measure of quality in the career force. Thus, only years of service affect the relative productivities of different soldiers in the career force. The second assumption reflects econometric findings that, among those having the same educational background, high-aptitude people realize significantly higher earnings throughout their working careers. Thus, AFQT I-IIIA soldiers are 4 percent to 8 percent more productive at all years of service. The third assumption, which mirrors the Army's position, holds that AFQT has equal effects on first-term and career performance.

Because the empirical evidence on high school education is mixed, CBO tested several possibilities. First, that education has no bearing on first-term performance; whether graduates or dropouts, AFQT I-IIIA recruits outperform AFQT IIIB recruits by about 10 percent, and AFQT IV recruits by about 20 percent. Second, that the average AFQT I-IIIA nongraduate is only as productive as the average AFQT IIIB graduate (part of the base case). And third, reflecting the findings of Rand's EUS, that the average high school graduate always outperforms the average nongraduate, regardless of AFQT.

TABLE A-3. RELATIVE PRODUCTIVITIES OF FIRST-TERM ENLISTED SOLDIERS UNDER ALTERNATIVE ASSUMPTIONS a/

	AFQT Categories		
Education	I-IIIA	IIIB	IV
Base Case			
Graduate	0.77	0.70	0.63
Nongraduate	0.70	0.63	b/
Alternative 1 c/			
Graduate	0.77	0.70	0.63
Nongraduate	0.77	0.70	b/
Alternative 2 d/			
Graduate	0.77	0.70	0.63
Nongraduate	0.60	0.54	b/

a. Productivity is expressed relative to a fully-trained AFQT I-IIIA soldier with between five and eight years of military service.
b. The Army does not enlist non-high school graduates who place in the lowest acceptable AFQT category.
c. Assumes that education has no effect on first-term performance.
d. Assumes that education plays a dominant role during the first term.

Finally, CBO tested two assumptions about the effects of experience. The first holds that the productivity profile of soldiers is like that of civilian workers, as revealed by increases in civilian wages with age. 6/ Converting civilian wage increases by age to military years of service suggests that soldiers with nine to twelve years' experience are about 28 percent more productive than those with five to eight years' experience, and so on. Since earnings may be an imperfect proxy for actual performance, the second assumption arbitrarily lets performance increase only half as fast as earnings over time. Tables A-3 and A-4 summarize these assumptions.

6. From David Jacquette and Gary Nelson, *The Implications of Manpower Supply and Productivity for the Pay and Composition of the Military Force: An Optimization Model* (Santa Monica, Calif.: The Rand Corporation, July 1974) p. 22. The authors borrowed from estimates provided by Gary Becker, *Human Capital* (New York: National Bureau of Economic Research, 1964).

TABLE A-4. RELATIVE PRODUCTIVITIES OF CAREER ENLISTED SOLDIERS UNDER ALTERNATIVE ASSUMPTIONS a/

Years of Service	AFQT Categories					
	I-IIIA	IIIB	IV	I-IIIA	IIIB	IV
	Substantial Returns to Experience b/			Modest Returns to Experience b/		
Alternative 1 c/						
5 to 8	1.00	0.91	0.82	1.00	0.91	0.82
9 to 12	1.28	1.16	1.05	1.14	1.04	0.93
13 to 16	1.51	1.37	1.24	1.24	1.13	1.02
17 to 30	1.75	1.59	1.43	1.34	1.22	1.10
Alternative 2 d/						
5 to 8	1.00	0.96	0.92	1.00	0.96	0.92
9 to 12	1.28	1.23	1.18	1.14	1.09	1.05
13 to 16	1.51	1.45	1.39	1.24	1.19	1.14
17 to 30	1.75	1.68	1.61	1.34	1.29	1.23
Alternative 3 e/						
5 to 8	1.00	1.00	1.00	1.00	1.00	1.00
9 to 12	1.28	1.28	1.28	1.14	1.14	1.14
13 to 16	1.51	1.51	1.51	1.24	1.24	1.24
17 to 30	1.75	1.75	1.75	1.34	1.34	1.34

a. See Table A-3.
b. Based on civilian wage increases by age.
c. Assumes that first-term effects persist into the career force.
d. Based on econometrically-derived relationship between ability and civilian earnings.
e. Assumes AFQT has no effect on career soldiers' performance.

ESTIMATING THE COSTS

Increases in starting pay dominate CBO's estimate of the costs of obtaining higher recruit quality. CBO assumed that enlistment bonuses would be employed to increase starting pay because they are an efficient means of attracting recruits. Only a narrow group would receive additional compensation, in this case AFQT I-IIIA high school graduates who serve in qualifying skills. Since they are large sums "up-front," enlistment bonuses offer especial appeal to young people who may prefer money now to money later. Studies find that youths have considerable time preferences for money, amounting to high discount rates of around 15 to 20 percent for money now. 7/ Since they have a higher regard for present benefits than for future payments of equal size, they are willing to trade the latter for smaller sums in the present.

In calculating the need for new recruiting resources, CBO also took note of the trade-offs made by Army recruiters in the investment of their time. Recruiters must balance the time spent seeking out high-quality candidates for service against the time spent screening, advising, and selecting youths of lower quality. If the Army's overall need for lower-quality recruits declined--as it would under the Army's program--recruiters would reallocate their time to producing more high-quality recruits without additional recruiting resources. Based on innovative work by the Rand Corporation, CBO assumed a trade-off elasticity of high-quality for lower-quality enlistments of -0.30. 8/

The rest of this section describes the other variable costs that are sensitive to changes in recruitment.

Recruiting and Turnover Costs

In the category of recruiting costs, CBO includes the costs of examining and processing recruits, of supporting the recruiting command, and of education assistance programs. (The direct costs of military personnel associated with these activities fall under "Pay and Benefits" and "Retirement".) High-quality youths are comparatively expensive to recruit, because they get a

7. R. Yilmaz Arguden, *Personnel Management in the Military: Effects of Retirement Policies on the Retention of Personnel* (Santa Monica, Calif.: The Rand Corporation, January 1986), p.60.

8. See James Dertouzous, *Recruiter Incentives and Enlistment Supply* (Santa Monica, Calif.: The Rand Corporation, May 1985), p. 29.

disproportionate share of the Army's education assistance, and also account for more than their share of the recruiting command's costs. Since high-quality youths are about four times more difficult to recruit into the Army than youths of lower quality, CBO assumed that the typical lower-quality youth costs only one-fourth as much to recruit. 9/ To increase the flow of high-quality recruits, many of the Army's nonpersonnel expenses would have to increase. Thus, a program that raised the need for AFQT I-IIIA high school graduates--even if it reduced the overall need for recruits--could raise the overall cost of recruiting.

For education assistance, CBO calculated only the Defense Department's share of the accrual charge, the amount that would have to be set aside today to pay for future supplemental benefits under the new GI Bill. The charge averages out to roughly $1,140 per high-quality recruit (in 1987 dollars).

In the category of turnover-related costs, about one-half consists of the variable expenses of training recruits: these include civilian salaries, ammunition, and maintenance of installations, but not the salaries of military trainers. CBO estimates that these costs average about $1,600 a recruit. The other half includes the expenses of paying for soldiers' travel between home and base when they enter or leave service (about $900 a trip), and any costs of unemployment compensation.

9. *Ibid.*, p. 19.

APPENDIX B

OCCUPATIONAL DESCRIPTIONS

Brief descriptions of various Army occupations mentioned in this study:

LANCE Missile Crewmember

Positions, emplaces, assembles, and prepares LANCE missiles for firing.

HAWK Missile Crewmember

Maintains and prepares HAWK missiles and associated equipment for launching missions.

HAWK Firing Section Mechanic

Maintains improved HAWK high-powered illuminator radar. Maintains mechanical, hydraulic, and electrical systems of the launcher, loader-transporter, and associated equipment.

HAWK Missile Fire Control Crewmember

Operates fire control equipment in command and acquisition or firing section of HAWK firing platoon. Operates engagement simulator in headquarters battery of HAWK missile battalion.

Administrative Specialist

Performs typing, clerical, and administrative duties.

Cavalry Scout

Assists in performance of armored reconnaissance.

Infantryman

Employs individual weapons and machine guns in combat operations. Closes with and destroys enemy personnel, weapons, and equipment.

Radio Teletype Operator

Operates radio teletype equipment to transmit and receive messages. Prepares messages in proper format for delivery.

Light Wheel Vehicle and Power Generation Mechanic

Troubleshoots and performs maintenance on internal combustion engines and accessories, powertrain, and chassis components of light wheel vehicles. Also maintains tactical, utility, and precise power generation equipment and associated equipment such as electric arc welders.

Unit Supply Specialist

Receives, stores, issues, accounts for, and preserves supplies in the unit.

Multichannel Communications Equipment Operator

Installs and operates radios, communications security devices, and multiplexer equipment.

Medical Specialist

Performs or assists with preventive, therapeutic, and emergency nursing care procedures under supervision of physician or nurse.

APPENDIX C

DETAILED PROJECTIONS

Detailed projections of recruitment and retention and costs under alternative recruiting policies.

TABLE C-1. PROJECTIONS OF CAREER PERSONNEL BY AFQT CATEGORY UNDER VARIOUS RECRUITING STRATEGIES (By fiscal year, in thousands)

AFQT	1987	1988	1989	1990	1991	Long-Run a/
Baseline						
I-IIIA	144.6	150.0	153.4	156.3	157.4	173.8
IIIB	83.5	84.2	82.9	83.0	83.4	77.0
IV	77.0	71.1	65.7	62.1	59.2	30.8
Total	305.1	305.3	302.0	301.4	300.0	281.6
Army Program (65 Percent I-IIIA)						
I-IIIA	144.6	150.0	153.4	155.8	157.9	179.8
IIIB	83.5	84.2	82.9	83.7	82.8	74.3
IV	77.0	71.1	65.7	62.1	59.1	30.1
Total	305.1	305.3	302.0	301.6	299.8	284.6
Army Program (69 Percent I-IIIA)						
I-IIIA	144.6	150.0	153.4	155.8	159.0	188.8
IIIB	83.5	84.2	82.9	83.7	81.4	63.3
IV	77.0	71.1	65.7	62.1	59.3	31.4
Total	305.1	305.3	302.0	301.6	299.7	283.5
One-Year Cut in Resources b/						
I-IIIA	144.6	150.0	153.4	156.3	157.3	173.9
IIIB	83.5	84.2	82.9	83.0	83.4	74.9
IV	77.0	71.1	65.7	62.1	59.1	31.2
Total	305.1	305.3	302.0	301.4	299.8	280.0
Three-Year Cut in Resources c/						
I-IIIA	144.6	150.0	153.4	156.3	157.3	169.6
IIIB	83.5	84.2	82.9	83.0	83.4	76.8
IV	77.0	71.1	65.7	62.1	59.1	31.7
Total	305.1	305.3	302.0	301.4	299.8	278.1

a. Projection year 2013.
b. Suspend enlistment bonuses and junior enlisted pay raise in 1987.
c. Same as b in 1987. Limit junior enlisted pay raises to 3 percent in 1988 and 1989.

TABLE C-2. PROJECTED DISTRIBUTION OF NON-PRIOR-SERVICE MALE ACCESSIONS BY EDUCATION UNDER DIFFERENT RECRUITING STRATEGIES (By fiscal year, in thousands) a/

Education and AFQT	1987	1988	1989	1990	1991
			Baseline		
HSDG I-IIIA	55.7	54.9	50.3	49.1	47.3
HSDG IIIB	30.0	30.3	30.5	30.7	31.2
HSDG IV	12.4	12.5	12.6	12.7	12.8
Non-HSDG I-IIIA	9.6	12.0	17.1	18.6	21.5
			Army Program (65 Percent I-IIIA)		
HSDG I-IIIA	57.6	58.1	58.5	58.2	58.9
HSDG IIIB	25.3	26.7	26.8	26.7	27.0
HSDG IV	12.4	12.5	12.6	12.6	12.7
Non-HSDG I-IIIA	12.4	12.5	12.6	12.5	12.7
			Army Program (69 Percent I-IIIA)		
HSDG I-IIIA	62.5	63.0	63.7	63.0	64.1
HSDG IIIB	20.3	21.6	21.9	21.6	22.0
HSDG IV	12.3	12.5	12.6	12.5	12.7
Non-HSDG I-IIIA	12.3	12.5	12.6	12.5	12.7
			One-Year Cut in Resources b/		
HSDG I-IIIA	53.0	48.4	47.3	46.1	44.4
HSDG IIIB	30.0	30.4	30.8	28.7	27.1
HSDG IV	12.4	12.6	12.7	12.8	13.0
Non-HSDG I-IIIA	12.5	19.3	20.7	24.6	30.1
			Three-Year Cut in Resources c/		
HSDG I-IIIA	53.0	46.9	44.1	43.0	41.5
HSDG IIIB	30.0	30.4	28.3	25.3	24.8
HSDG IV	12.4	12.6	12.8	12.9	13.2
Non-HSDG I-IIIA	12.5	20.9	27.0	32.3	34.3
Non-HSDG IIIB	0.0	0.0	0.0	0.0	2.5

NOTE: HSDG signifies high school diploma graduate.

a. Assumes 10,300 female, NPS, HSDG I-IIIA accessions in 1987; 10,900 such accessions in later years. Also, 5,600 female HSDG IIIB accessions in 1987, 4,700 in later years.

b. Suspend enlistment bonuses and junior enlisted pay raise in 1987.

c. Same as b in 1987. Limit junior enlisted pay raises to 3 percent in 1988 and 1989.

TABLE C-3. PROJECTED VARIABLE COSTS OF MANNING THE ARMY UNDER ALTERNATIVE RECRUITING STRATEGIES, FISCAL YEARS 1987-1991 (In millions of current dollars) a/

Type of Cost	1987	1988	1989	1990	1991	Five-Year Total
			One-Year Cut in Resources			
Recruiting b/	235	235	240	245	245	1,200
Turnover c/	625	665	690	720	760	3,460
Pay and Benefits d/	12,795	13,565	14,345	15,205	16,130	72,040
Retirement Accrual e/	3,380	3,585	3,805	4,035	4,290	19,095
Enlistment Bonuses	15 f/	60	95	95	100	365
Total	17,050	18,110	19,175	20,300	21,525	96,160
			Three-Year Cut in Resources			
Recruiting b/	235	230	230	235	240	1,170
Turnover c/	625	665	695	725	765	3,475
Pay and Benefits d/	12,795	13,530	14,275	15,130	16,050	71,780
Retirement Accrual e/	3,380	3,580	3,780	4,010	4,255	19,005
Enlistment Bonuses	15 f/	55	90	95	95	350
Total	17,050	18,060	19,070	20,195	21,405	95,780

a. Estimates of inflation and wage increases originate from CBO's medium-term economic projections.

b. Includes costs of examining and processing recruits, supporting the U.S. Army Recruiting Command, and the accrual cost of maintaining the Army College Fund (supplemental education benefits with an estimated accrual value of about $1,140 per high-quality recruit).

c. Includes variable expenses of training recruits--civilian salaries, ammunition, maintenance, and installations--amounting to about $1,600 a recruit. (Source: U.S. Army, *TRADOC Resource Factor Handbook*, vol. 2, Resource Estimating Relationships). Also, the expense of soldiers' travel between home and military installation (accession and separation permanent change of station moves).

d. Includes pays and allowances in the Military Personnel Account (such as basic pay, quarters allowance, reenlistment bonuses), plus operation and maintenance costs of medical care (inpatient and outpatient), plus reimbursement for travel not included in c.

e. Calculated as a percentage of basic pay, with the overall factor dependent on the composition of the enlisted force. For 1985, CBO calculates an accrual charge particular to the Army of 41.1 percent--about 10 percentage points less than the charge for all of the Defense Department that is used in budget calculations.

f. Represents residual payments to enlistees from fiscal year 1986.